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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,012	08/26/2003	C. Earl Woolfork	W003-4000	3337
48162 7590 10/11/2007 THE PATEL LAW FIRM, P.C. 2532 DUPONT DRIVE IRVINE, CA 92612			EXAMINER FLANDERS, ANDREW C	
			ART UNIT 2615	PAPER NUMBER
			MAIL DATE 10/11/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

Application No.

10/648,012

Applicant(s)

WOOLFORK, C. EARL

Examiner

Andrew C. Flanders

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**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 20 September 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: \_\_\_\_\_.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☒ Other: See attached remarks.

  
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SUPERVISORY PATENT EXAMINER

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 20 September 2007 have been fully considered but they are not persuasive.

Regarding the arguments to the claim rejections under 35 U.S.C. 112 first paragraph, Applicant points to paragraphs [0010], [0013] and [0014] of the specification to show that the fuzzy logic detector within the receiver is enabled. Examiner respectfully disagrees. The paragraphs pointed to by Applicant do show a fuzzy logic method. However, it is unclear whether this "fuzzy logic detector" is a method, software, logic or hardware device. Furthermore, the specification leads one of ordinary skill in the art to believe that this "detector" is a hardware module of some sort. If it is to be a hardware module, it is not sufficiently shown in Figure 3, more specifically, it is not shown how this module interacts with the rest of the elements in Figure 3 (i.e. where is this detector located with respect to the other block elements?) Further, if it is just to be software, which Examiner does not necessarily interpret from a reading of the specification, which module in Figure 3. performs these operations. Neither of these elements are addressed by the specification and thus the claim cannot be enabled.

Applicants arguments regarding the 35 U.S.C. 102(e) rejection in view of Lindemann (U.S. Patent Application Publication 2004/0223622) are not persuasive for

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the same reasons stated before in the Final Rejection mailed 23 July 2007. To further clarify, Applicant is alleging that Lindemann is not directed to a system capable of

(1) providing a user with independent audio reproduction; and

(2) reproduction free of interference from other users or wireless devices.

Examiner respectfully disagrees with this allegation. Element (1) can be met in multiple ways. For example, a single user of Lindemann's system enjoying a music selection would meet the limitation of "independent audio reproduction" by the virtue of listening to the music alone (i.e. independently). Further, the speakers can be independently operated and selected as is shown in the passages pointed out by Applicant. Even further, the passages noted by Applicant state that the music may be enjoyed in separate rooms such as the kitchen or living room (other rooms clearly anticipated) thus a user in the kitchen may be listening to one musical selection while the user in the living room might not, thus the kitchen user is listening to "independent audio reproduction."

Element (2) is clearly met by virtue of the fact that it is CDMA reproduction. CDMA's entire goal is to minimize interference to provide a clear transmission. Furthermore, the status messages indicate to the speakers which speakers should operate and which speakers should reproduce what. This is succinctly shown in paragraph 66. The fact that the speakers decode status messages to determine whether or not to produce music as well as what to produce (i.e. Left speaker reproduces the Left status message transmission and not the Right status message

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transmission) clearly meets the "reproduction free of interference from other users or **wireless devices**.

Applicants arguments regarding the claim rejections under 35 U.S.C.103 of Lindemann (U.S. Patent Application Publication 2004/0223622) in view of Sato (U.S. Patent 4,970,637) are not persuasive.

Applicant alleges that the combination does not teach (1) for private audio reproduction of said music or (2) reproduce said audio output representative of said music, if the unique user code bit sequence is recognized.

Regarding (1), as shown above in the 102(e) arguments of Lindemann, the system may enable speakers in differing rooms, i.e. the kitchen or living room. Thus a user may enjoy music in the living room completely separate from another user in the kitchen, thus being "private".

Regarding (2) the status messages are equated to the unique user code as stated by Applicant. To further clarify, para [0065] explicitly states that "the status information contains commands to enable or disable a particular group of speakers." Thus, if the status message enables a speaker (i.e. if the unique user code bit sequence is recognized [in this case if the enable command is recognized]) the speaker reproduces music (i.e. reproduce said audio output representative of said music).

Applicant further alleges regarding claim 28 that modifying Lindemann into a headphone set is using Applicant's own disclosure and that such a modification

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destroys the intended operation of Lindemann. Examiner respectfully disagrees. First, Applicant has provided no evidence as support for this allegation. Second, Examiner maintains that using headphones in place of speakers is notoriously well known. Lindemann is concerned with enabling and disabling speaker sets in multiple rooms/zones within a household. Often speaker systems will include a port or other connection to allow a user to insert a headphone that disables the speaker system and enables the headphones. This does not destroy the purpose of Lindemann which is to provide music to multiple zones, it merely changes the end reproduction unit.

Regarding the arguments pertaining to claim 51, Lindemann's status messages read upon the claimed limitation of the unique user code as shown above.

Applicant states regarding claim 30:

"First, Claim 30 includes "fuzzy logic to enhance detection of the unique user code." Since Lindemann does not require a "unique user code," there is no need or motivation to place "fuzzy logic to enhance detection of the unique user code," in the receiver of Lindemann."

"Applicant observes that Benthin is relied upon for soft decisions in a receiver or during demodulation of a signal. (See page 14 of the FOA.) However, Benthin does not teach "fuzzy logic to enhance detection of the unique user code," in the receiver. Thus, any combination of Lindemann in view of Sato and Benthin still would not produce applicant's claimed invention."

Examiner respectfully disagrees. With respect to the first allegation, it is submitted that it is clearly shown above how the status messages correspond to the unique user code limitation. Benethin clearly teaches using soft decisions in a receiver (i.e. fuzzy logic). Applying the teachings of Benethin (specifically the soft decision

decoding) to the receiver's of Lindemann to determine the status messages, meets the claimed limitation of "fuzzy logic (i.e. soft decision decoding) to enhance detection of the unique user code (i.e. Lindemann's status messages).

Regarding the arguments as to claim 50, Applicant alleges that Lavelle does not teach "an audio source to provide an audio signal representative of music having an existing analog headphone plug." Applicant states that "Lavelle has no need for a headphone plug since the original configuration of the primary reference seeks to provide wireless communications in a vehicle (obviating the need for a headphone plug to connect the headphone."

Examiner respectfully disagrees. First, while Lavelle does not explicitly teach an "an audio source to provide an audio signal representative of music having an existing analog headphone plug," it is at least suggested/made obvious. Lavelle recognizes in col. 4 lines 35 – 40 the need to accept other inputs not listed. Furthermore, in col. 5 lines 35 – 40 Lavelle further discusses accepting inputs from devices such as portable cd players, handheld video games etc. It is notoriously well known in the art that these devices typically provide an analog out headphone jack. While it is not explicitly stated, it is at least obvious that Lavelle's system is configured to accept these inputs from these devices outputs.

Furthermore, it appears to the Examiner that Applicant is misreading the rejection. It appears as though Applicant is arguing there would be no need to connect Lavelle's headphones to a speaker jack since they are already wireless. The Examiner

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agrees with this statement, however this is never stated in the rejection. Rather, the rejection states that one audio source is the output from a portable devices headphone jack (i.e. an iPod) which corresponds directly to the portable devices stated in col. 5 lines 30 – 40. It is never argued by the Examiner to modify the headphones of Lavelle.

Applicant further alleges that there is no unique user code taught. Examiner respectfully disagrees. The specific carrier frequency enables the device to tune to a particular program. This is equated with the unique user code. If this was not unique to each headphone device, there would be nothing to prevent interference or allow any selection as shown in col. 7.

Applicant further alleges that Lavelle does not “provide a particular user with private audio reproduction free of interference from other users of other wireless digital audio music systems in a shared space.”

Examiner is unsure of the logic behinds such an allegation. Examiner submits that the whole purpose to Lavelle is to provide at least two users of the system, wireless audio via headphones minimizing interference within a car. Lavelle allows two users to wear wireless headphones and enjoy two different pieces of media content. Essentially this provides a user (i.e. one of the listeners of the headphones) with private audio reproduction (i.e. by virtue of the nature of headphones) free from interference from other users (i.e. headphones 152 and 154 have the interference minimized utilizing CDMA technology col. 7) in a shared space (i.e. the interior of an automobile).